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Inquiry into Encryption Technology for Satellite Cable Programming

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

COMMENTS OF DIRECTV, INC.

BACKGROUND

In HCG's DBS operations, in contrast, DirecTV will market the first multi-channel video programming service using the DBS frequency band directly to consumers.

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DirecTv will consolidate programming from different sources, encrypt the programming, and encode subscription information in the signal. The DirecTv system, operating as a true DBS service, will make use of a different frequency band, different polarization scheme, and a different transmission technology -- digital -- from those used in the C band industry. Video compression and high-definition television transmission standards also will mandate a unique reception-decryption device for DirecTv's service.

The design of DirecTv's signal processing and encryption subsystems is complete, and DirecTv is entering the production phase for these essential components of its DBS system. The signal processing and encryption technology that will be used by DirecTv have been developed expressly for DBS, and take advantage of state-of-the-art advances in digital technology. The encryption and conditional access processes employed by DirecTv will incorporate News Datacom Inc.'s "smart card" -based technology. These systems have been designed from the ground up for consumer home use, in contrast to C band technology which is relatively mature and which attempts to accommodate transmissions to both cable systems and, as a byproduct, home satellite dish (HSD) owners. For these reasons, the considerations that may be relevant for the C band industry simply are not applicable in the DBS service.

COMMENTS

This inquiry has as its primary focus the reexamination of the de facto industry standard for encryption of satellite cable programming transmitted to cable systems and HSDs in the C band. The Commission has also requested comment on the possible effects on current industry practices of the introduction of new video delivery technologies, including digital transmission systems, video compression, and DBS.

DirecTv believes the Notice of Inquiry is addressed principally to the FSS transmission of satellite cable programming, and therefore DirecTv has no comment on the benefits of "intra-VC II competition" or the other matters raised in part III of the Notice. However, DirecTv does believe that its entry into the video programming distribution market will have a pro-competitive effect on the industry generally, and may be relevant to the Commission's consideration of the General Instruments Corporation (GIC) so-called DBS Authorization Center, and the question whether a centralized authorization and encryption facility is necessary and desirable in the video marketplace.

Because C band video distribution services involve the transmission of many sources of programming via a number of different FSS satellites, the GIC Authorization Center has filled a need in the C band industry for a clearinghouse for all satellite cable programming, making it possible for third-party packagers to provide consumers with the benefits of multi-channel video programming (through their cable system or HSD) using a single decoder.

The "bottleneck" nature of the GIC Authorization Center will change, however, when HCG launches its DBS system in early 1994. HCG will have the capacity to provide hundreds of video programming channels directly to subscribers, and DirecTv will market and provide customer service functions with respect to these DBS services. As the Commission stated in the Notice of Inquiry, DirecTv will perform its encryption and service authorization functions from a centralized "DBS authorization center" of its own, to be co-located with DirecTv's uplink facility in Castle Rock, Colorado. DirecTv's subscribers will be able to access the widest selection of video programming from multiple sources using the decoder designed for DirecTv. If the Commission deems the

GIC Authorization Center is currently an "essential facility" for the encryption and authorization of video programming distribution via satellite, it certainly will become less essential as other multichannel video distributors in the DBS and Ku Band FSS services, such as DirecTv, enter the market.

Because DirecTv will offer a full range of cable programming comparable to the panoply of services currently available via C and Ku band FSS satellites, the consumer will not need to subscribe to both DBS and FSS services, and will have no need for multiple decoders. Therefore, the fact that DirecTv's encryption technology is incompatible with VC II should not be of concern to the Commission.^{1/} Thus, DirecTv continues to support the Commission's current policy not to mandate encryption standards for the satellite video industry, and feels that it is especially appropriate in the DBS context not to require licensees to adopt particular encryption standards or decoder technologies.

^{1/} The Commission is concerned about the cost to consumers of purchasing more than one decoder, but the Commission's concerns are misplaced: consumers will soon have a choice between full-service multi-channel video programming providers, and the cost of DirecTv services will be only a fraction of the cost of C band HSDs.